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melt 10 is extracted by a wipe-off operation. A large lateral ratio can be obtained by properly setting a **seed** angle and a cooling speed. Hence, a high quality **semiconductor** crystal thin **film** can be obtained on the insulating film 2.

IC ICM H01L021-208
ICS H01L021-84

L150 ANSWER 25 OF 46 JAPIO (C) 2004 JPO on STN
ACCESSION NUMBER: 1988-204612 JAPIO
TITLE: FORMATION OF SOI **SINGLE CRYSTAL**
INVENTOR: NAMITA HIROMITSU
PATENT ASSIGNEE(S): AGENCY OF IND SCIENCE & TECHNOL
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 63204612	A	19880824	Showa	H01L021-20

APPLICATION INFORMATION
STN FORMAT: JP 1987-35674 19870220
ORIGINAL: JP62035674 Showa
PRIORITY APPLN. INFO.: JP 1987-35674 19870220
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1988

AN 1988-204612 JAPIO
AB PURPOSE: To make it possible to control the generating position of a crystal grain boundary, by a method wherein, when an SOI film is going to be formed into a **single crystal**, the formation of **single crystal** is performed using a wavelike **seeds** in which linear **seeds** are slantly arranged in the scanning direction of the energy beam, with which a polysilicon film or an amorphous **silicon film** is fused, is **annealed.**
CONSTITUTION: **Seeds** 1 and a **silicon** oxide **film** 5 are formed by oxidizing the surface of a silicon substrate 4 using a selective oxidizing method, and a polysilicon film 6 and a **silicon** oxide **film** cap 7 are deposited using a CVD method. Wavelike **seeds** is used, and for example, when the plane direction <001> is used on the silicon substrate 4, the **seeds** having the combination of <**110**> and <**110**> **orientation** is formed, and a recrystallization is conducted using a linear electron beam. The electron beam is scanned in the **direction** <**100**> in the case of the **seed** of combination of <110> and <110>. When a recrystallizing operation is performed under the above-mentioned condition, the solid-liquid interface is formed in